Appl: No. 10/606,051

Amdt. Dated December 22, 2005

Reply to Office Action of August 22, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (currently amended) A drilling apparatus that includes a drilling string comprised of a drilling pipe, in a borehole, and a drilling bit, said apparatus comprising:

a formation fluid sampling and hydraulic testing tool <u>disposed in said</u>

<u>drilling string and below said drilling pipe;</u>

a first packer member disposed about said drilling pipe in said borehole above said sampling and testing tool; and

means associated with said first packer member for effecting extension and retraction of said first packer member to and from sides of said borehole, wherein said first packer member includes a bladder that is adapted to be expanded and deflated to effect extension and retraction respectively of said first packer member, wherein said means for effecting extension and retraction includes a pressure storage means containing a pressurized gas or other medium, and a vacuum storage means, wherein a first valve is associated with said pressure storage means and a second valve is associated with said vacuum storage means, wherein said first valve is adapted to release compressed gas from said pressure storage means to effect expansion of said bladder and hence extension of said first packer member, and wherein said second valve is adapted to subject said bladder to vacuum and hence to effect retraction of said first packer member.

Appl. No. 10/606,051 Amdt. Dated December 22, 2005 Reply to Office Action of August 22, 2005

- 2. (currently amended) A drilling apparatus according to claim 10 4, wherein said first packer member includes a bladder that is adapted to be expanded and deflated to effect extension and retraction respectively of said first packer member.
- 3. (original) A drilling apparatus according to claim 2, wherein said means for effecting extension and retraction includes a pressure storage means containing a pressurized gas or other medium, and a vacuum storage means.
- 4. (original) A drilling apparatus according to claim 3, wherein a first valve is associated with said pressure storage means and a second valve is associated with said vacuum storage means, wherein said first valve is adapted to release compressed gas from said pressure storage means to effect expansion of said bladder and hence extension of said first packer member, and wherein said second valve is adapted to subject said bladder to vacuum and hence to effect retraction of said first packer member.
- 5. (currently amended) A drilling apparatus according to claim 3, that includes a drilling string comprised of a drilling pipe, in a borehole, and a drilling bit, said apparatus comprising:

a formation fluid sampling and hydraulic testing tool disposed in said drilling string and below said drilling pipe;

a first packer member disposed about said drilling pipe in said borehole above said sampling and testing tool; and

means associated with said first packer member for effecting extension and retraction of said first packer member to and from sides of said borehole, wherein said first packer member includes a bladder that is adapted to be expanded and

Appl. No. 10/606,051 Amdt. Dated December 22, 2005 Reply to Office Action of August 22, 2005

deflated to effect extension and retraction respectively of said first packer member, wherein said means for effecting extension and retraction includes a pressure storage means containing a pressurized gas or other medium, and a vacuum storage means, wherein said means for effecting extension and retraction is in the form of two concentric tubular members disposed about said drilling pipe, wherein one of said tubular members forms said pressure storage means, and wherein the other of said tubular members forms said vacuum storage means.

- 6. (original) Drilling apparatus according to claim 4, wherein a second packer member is disposed about said drilling pipe in said borehole below said sampling and testing tool, and wherein further means are associated with said second packer member for effecting extension and retraction of said second packer member to and from sides of said borehole.
- 7. (original) A drilling apparatus according to claim 6, wherein said second packer member includes a bladder that is adapted to be inflated and deflated to effect extension and retraction respectively of said second packer member.
- 8. (original) A drilling apparatus according to claim 7, wherein said means for effecting extension and retraction includes a pressure storage means containing a pressurized gas or other medium, and a vacuum storage means.
- 9. (original) A drilling apparatus according to claim 8, wherein a first valve is associated with said pressure storage means and a second valve is associated with said vacuum storage means, wherein said first valve is adapted to release compressed gas from said pressure storage means to effect inflation of said bladder and hence extension of said second packer member, and wherein said

Appl. No. 10/606,051 Amdt. Dated December 22, 2005 Reply to Office Action of August 22, 2005

second valve is adapted to subject said bladder to vacuum and hence to effect retraction of said second packer member.

10. (currently amended) A drilling apparatus according to claim 1, wherein that includes a drilling string comprised of a drilling pipe, in a borehole, and a drilling bit, said apparatus comprising:

a formation fluid sampling and hydraulic testing tool disposed in said drilling string and below said drilling pipe;

a first packer member disposed about said drilling pipe in said borehole above said sampling and testing tool;

means associated with said first packer member for effecting extension and retraction of said first packer member to and from sides of said borehole; and

a bi-directional pressure reduction valve mechanism is disposed about said drilling pipe, above said first packer member, for controlling pressure in the drilling pipe and the testing tool.

11. – 19. (cancelled)